



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|--------------------------|------------------------|
| 10/541,549 | 07/06/2005 | Christine Rigaudeau | PSA0300109 | 8237 |
| 29980 7590 11/10/2008 NICOLAS E. SECKEL Patent Attorney 1250 Connecticut Avenue, NW Suite 700 WASHINGTON, DC 20036 | | | EXAMINER TRAN, DIEM T | |
| | | | ART UNIT 3748 | PAPER NUMBER |
| | | | MAIL DATE 11/10/2008 | DELIVERY MODE PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/541,549

Applicant(s)

RIGAUDEAU ET AL.

Examiner

DIEM TRAN

Art Unit

3748

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 August 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 5-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6 and 9 is/are rejected.
- 7) ☒ Claim(s) 5, 7 and 8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-856)
- Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

This office action is in response to an amendment filed on 8/7/08. In the amendment, claim 1, 5, 6, 8 have been amended and claim 4 has been canceled. Overall, claims 1-3, 5-9 are pending in this application.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 6, 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et al. (US Patent 6,378,297) in view of Schafer-Sindlinger et al. (US Patent Application 2004/0065078).

Regarding claim 1, Ito discloses a system for assisting regeneration of a particle filter integrated in an exhaust line of a motor vehicle diesel engine, the engine being associated with various units, including:

means for admitting air into the engine; means (24) for recycling exhaust gases from the engine to the inlet thereof; a turbocompressor (14); a particle filter (21) including a filter medium adapted to trap particles of soot present in the exhaust gases of said engine; an oxidation catalytic converter on the upstream side of the particle filter in the exhaust line (see Figure 23, col. 19, lines 66-67, col. 20, lines 1-4); a common system (26) for feeding fuel to the cylinders of the engine, including electrical fuel injectors associated with those cylinders (see col. 3, lines 27-32); means for acquiring information relating to various operating parameters of the engine and the

units associated therewith; means for monitoring the operation of the air admission means, the recycling means in order to monitor the operation of the engine, these means being further adapted to trigger a phase of regenerating the particle filter by combustion of the particles trapped therein by triggering a phase of multiple injections of fuel into the cylinders of the engine during their expansion phase (see Figures 10, 12, col. 19, lines 6-20, 29⁺); however, fails to disclose adding to the fuel an additive to reduce the combustion temperature of particles trapped in the particle filter, and said particle filter having a region that is more strongly impregnated with the oxidation catalyst. Schafer-Sindlinger teaches that it is conventional in the art to add an additive to the fuel to reduce the combustion temperature of particles trapped in the particle filter (see page 1, par. [4]), and to have an inlet region of a particle filter that is more strongly impregnated with the oxidation catalyst for oxidizing hydrocarbons and CO present in the exhaust gases flowing through said filter (see page 5, par. [46, 51]).

It would have been obvious for one having ordinary skill in the art, to have utilized the teaching of Schafer-Sindlinger in the Ito system, since the use thereof would have saved fuel due to a lower required soot combustion temperature and improved the efficiency of the filter device.

Regarding claims 2, 3, Schafer-Sindlinger further teaches that said catalyst is a metal such as platinum (see page 5, par. [51]).

Regarding claims 6, 9, Schafer-Sindlinger further teaches that the particle filter has an inlet region that is more strongly impregnated with the oxidation catalyst and the terminal portion of the filter is not impregnated with the oxidation catalyst (see page 5, par. [46, 51]).

Allowable Subject Matter

Claims 5, 7, 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments filed on 8/7/08 have been fully considered but they are not deemed persuasive. Applicant has argued that Schafer-Sindlinger does not disclose a region of the particle filter that is more strongly impregnated with the oxidation catalyst. The Examiner respectfully disagrees, since Schafer-Sindlinger discloses that a particle filter has an inlet region coating with oxidation catalyst and the outlet portion of the filter is not coated with the oxidation catalyst (see page 5, par. [46, 51]). Therefore, the inlet region of the filter in Schafer-Sindlinger is more strongly impregnated with the oxidation catalyst than the outlet region of the filter.

Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion

Any inquiry concerning this communication from the examiner should be directed to Examiner Diem Tran whose telephone number is (571) 272-4866. The examiner can normally be reached on Monday -Friday from 8:30 a.m.- 5:00p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion, can be reached on (571) 272-4859. The fax number for this group is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 800-786-9199 (toll-free).

/Diem Tran/

Patent Examiner

/Thomas E. Denion/

Supervisory Patent Examiner, Art Unit 3748